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EXAMINER

PENG, FRED H

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/935,831

Applicant(s)

YOSHII ET AL.

Examiner

Fred Peng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/19/2007 has been entered.

**DETAILED ACTION**

***Response to Arguments***

2. Applicant's arguments filed 03/19/2007 have been fully considered but they are not persuasive.

Applicant argues on page 3 lines 7-10 of the 03/19/2007 Remarks, that Gelman does not teach or suggest "managing reservation of a part of the shared resources allocated or re-allocated by the shared-resource management unit and managing distribution of the part of the shared resources to each of the media distribution server" as now recited in Claim 1.

In response to applicant's argument, the examiner respectfully disagrees. Gelman does teach managing reservation of a part of the shared resources allocated or re-allocated by the shared-resource management unit and managing distribution of the part of the shared resources to each of the media distribution server (Col 6 lines 43-46; Col 12 lines 23-26; Col 11 lines 24-38; it is the combination of IWH-SP 11 and CO 40 to manage and schedule [managing reservation of], not just requesting, a part of the shared resources [requested information programs like video-on-demand programs] to each of the media distribution server [CO BUFFER 44]; CO-SP 41 also manage reservation and distribution of a part of shared resources by using the script and program presentation map to manage and control service to the subscribers; to manage and control services to subscribers is to manage reservation and distribution of a part of shared resources; Col 11 lines 36-38).

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***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. *Claims 7 and 9* are rejected under 35 U.S.C. 101 because the Claimed invention is directed to non-statutory subject matter.

Claims 7 and 9 are directed to a computer-readable medium and carrier signal with descriptive material. The medium, based on the description in the specifications (page 42 lines 20-24) can also be a form of signal transmitting through a communication network. While "functional descriptive material" may be claimed as statutory product (i.e., a manufacture) when embodied on a tangible computer readable medium, a signal embodying that same functional descriptive is neither a process nor a product (i.e., a tangible thing) and therefore does not fall within one of the four statutory classes of 101. Rather, signal is a form of energy, in the absence of any physical structure or tangible material.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-4 and 7-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Gelman et al (US 5,371,532).

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Regarding Claim 1, Gelman teaches a media-distribution-resource management apparatus system of fig. 2 & 3 (and corresponding computer-readable storage medium, means, method and carrier signal) managing shared resources (information programs, i.e., media content; col. 3, lines 33-37) of media distribution server (fig.3; -14, -44) and connected via a network (items 90, 91 - fig. 2-3) to media distribution servers (information warehouses 10 or Client Offices 40 provide media distribution resources for client premises equipment 70) and content distributors, (12, 13 -fig. 3; col. 3, lines 24-37; col. 4, lines 14-23; col. 4, line 65-col.5, line 11; col. 1, lines 23-28), comprising:

a resource-utilization-information management unit (IWH 10 - fig. 2-3) managing shared-resource information about both available network resources (IWH components 11 & 15 detect conducive traffic [available] conditions on the network bandwidth for distributing the shared resources; col. 4, lines 13-23; col. 12, lines 11-15 & 23-24) and available media-distribution-system resources (managed and scheduled based on information managed by IWHs, client offices 40 are available to distribute content; col. 3, lines 45-47; col. 4, lines 13-23; col. 12, lines 21-26; col. 6, lines 43-56);

a shared-resource management unit (IWH 10) allocating (col. 3, lines 45-47) or re-allocating (col. 4, lines 19-23; col. 5, lines 30-34) the shared resources based on a resource utilization request from each content distributor (CO 40 -fig. 2-3 request use of information programs/content from the IWH) (col. 3, lines 34-36, 45-47; col. 6, lines 33-37, 43-50);

a distribution management unit (IWH-SP 11, CO-SP 41 - fig. 3) manage reservation of (requesting/managing/scheduling) a part of the shared resources (VOD information programs) (col. 3, lines 49-52, lines 56-60; col. 4, lines 13-15; col. 6, lines 43-46; col. 12, lines 23-25; Col 11 lines 36-38) allocated or re-allocated by the shared-resource management unit and manage distribution of the part of the shared resources to each of the media distribution servers (col. 3, lines 56-60) (col. 6, line 61 - col. 7, line 10 - in which the CO and IWH reserve/request a program segment to be scheduled for transmission from the IWH and after receipt of the segment the CO

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will transfer the segment to a CO buffer 44/server which provides the content distribution service to the client 70; col. 11, lines 28-42; col. 8, line 53 - col. 9, line 33);

a distributor management unit (IWH 10/IWH-SP 11 - fig. 3) managing information about each content distributor (the IWH manages CO request information, and script information for enabling playout of transmitted programs at the CO - col. 6, lines 33-37, 43-50; col. 6, line 68 - col. 7, line 1 ; col. 9, lines 1-15; col. 3, lines 49-52); and

a viewer management unit (CO 40) managing information about a viewer permitted to access at least one of the media distribution servers (CO manages subscriber request information, subscriber playback control input information, col. 3, lines 49-52; col. 3, lines 61-66).

Regarding Claim 2, Gelman teaches the resource-utilization-information management unit (IWH 10), comprising:

a server-resource management unit (IWH-SP 11 - fig. 3) managing resource information about a media-distribution server (12/14- fig. 3) (col. 6, lines 46-50); and

a network-resource management unit (IWH-SP 11- fig. 3) managing information about network resources for media distribution (col. 12, lines 11-26).

Regarding Claim 3, Gelman teaches the shared-resource management unit (IWH 10), comprising:

a resource-utilization-information extraction unit (IWH-SP 11 - fig. 3) extracting available resource information from said resource-utilization-information management unit (col. 12, lines 11-12); and

a shared-resource-availability display unit displaying information about available shared resources for a media distributor (CO -40) (col. 11, lines 39-48 & lines 62-64);

a resource-utilization-information input unit (15) the media distributor inputting a resource utilization request (col. 6, lines 51-56);

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a shared-resource distribution unit distributing a utilization right of the shared resource in a specific time period to said distribution management unit installed in each of the media distributors based on information that is obtained in each time zone by the resource-utilization-information extraction unit and resource-utilization-information input unit (col. 11, lines 29-42; col. 6, lines 24-26 & lines 42-45 and col. 8, lines 22-24; which reads on specific time period; col. 12, lines 18-26);

a shared-resource-utilization amount extraction unit extracting a utilization situation of the shared resource in a specific time period (col. 12, lines 11-26); and

a shared-resource re-distribution unit redistributing a utilization right of an unused one of the shared resources to said distribution management unit based on both the utilization situation and distribution request in a specific time period extracted by said distribution management unit (col. 8, lines 53-col. 9, line 33; col. 9, lines 52-56; which reads on a specific time period extracted).

Regarding Claim 4, Gelman teaches the distribution management unit (CO 40), comprising:

an available reservation-candidate display unit displaying available content candidates to be reserved within a scope of a utilization right distributed by said shared-resource management unit (col. 11, lines 22-42);

a distribution-reservation input unit making a viewer select at least one content to be distributed out of the displayed candidates (col. 11, lines 42-44);

a distribution-reservation management unit reserving distribution for a viewer based on the selection made by the viewer from the displayed candidates (col. 11, lines 45-50);

a direct viewing reception unit making a viewer candidate without a reservation within a media distribution time (col. 11, lines 55-61; a program previously buffered in online storage);

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a shared-resource confirmation unit making an inquiry for said shared-resource management unit about whether an unused one of the shared resources is available, based on the selection made by the viewer from the displayed candidates (col. 55-64);

a direct-viewing permitting unit permitting viewing within the media distribution time based on the utilization right re-distributed by said shared-resource management unit (col. 11, line 64- col. 12, line 26; col. 8, line 53 - col. 9, lines 33; which reads on re-distributed); and

a distribution-instructing unit instructing the media distribution server to perform media distribution to a viewer that is permitted to receive direct distribution out of both viewers with the reservation of media distribution and viewer candidates without reservations (col. 12, lines 15-19).

Regarding Claim 7, it is analyzed and rejected the same as Claim 1 above.

Regarding Claim 8, it is analyzed and rejected the same as Claim 1 above.

Regarding Claim 9, it is analyzed and rejected the same as Claim 1 above.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. *Claim 5* is rejected under 35 U.S.C. 103(a) as being unpatentable over Gelman et al. (US 5,371,532) in view of Lin et al. (US 6,052,785).

Regarding Claim 5, Gelman discloses the distributor management unit/IWH 10 is connected to a plurality of media distributors/COs 40 via a (bidirectional link/multi-tiered) network



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90 -fig. 2 (col. 6, lines 8-14). Gelman further teaches a distributor-information input unit receiving from the content distributor an identifier (central office addressing information) of the content distributor (col. 5, lines 55-59, lines 37-39).

However, Gelman fails to specifically disclose a distributor authentication unit authenticating the content distributor based on the identifier.

In an analogous art Lin teaches in a multi-tiered distributed processing architecture it is desirable to provide a distributor authentication unit 150 - fig. 1 authenticating distributors (server/clients below the authenticating middle tier server) based on an identifier (credential/User ID/Distinguished Name) (col. 5, lines 35-37, 51-53; col. 6, lines 40-45; col. 7, lines 13-14; col. 5, lines 14-22) for the purpose of better protecting encryption keys (col. 5, lines 64-68) and repeatedly validating client access to multiple applications without the overhead and increasing server responsiveness and throughput (col. 8, lines 10-18; col. 4, lines 30-39).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Gelman to include a distributor authentication unit authenticating the media distributor based on the identifier as taught by Lin for the advantage of increasing system security by validating client access to multiple applications without large increases in server overhead and increasing server responsiveness and throughput (Lin - col. 8, lines 10-18; col. 4, lines 30-39).

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gelman et al. (US 5,371,532) and Saito et al. (US 6,275,941 B1).

Regarding Claim 6, Gelman discloses dynamically dedicating a CO buffer 44 (fig. 2) to individual viewer candidates/CPEs 70NOD subscribers from a plurality of CPEs (col. 7, lines 2-21) however, Gelman fails to disclose the viewer management unit (CO 40), comprises:

a viewer-information input unit inputting information about a viewer candidate; and

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a viewer authentication unit authenticating the viewer candidate based on the input information.

In an analogous art Saito teaches it is desirable to provide a viewer management unit/application server 6 (fig. 1), that comprises:

a viewer-information input unit inputting information about a viewer candidate; and  
a viewer authentication unit authenticating the viewer candidate based on the input information (col. 8, line 67 - col. 9, line 11), for the purpose of checking whether the user has right to access the application server based on security information (col. 9, lines 12-15).

Therefore it would have been obvious to one of ordinary skill in the art' at the time of the Applicant's invention to modify the system of Gelman to include the limitations the viewer management unit, comprising:

a viewer-information input unit inputting information about a viewer candidate; and  
a viewer authentication unit authenticating the viewer candidate based on the input information as taught by Saito for the advantage of increased security and user access control (Saito- col. 9, lines 12-15; Gelman- col. 7, lines 2-4).

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**Conclusion**


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Peng whose telephone number is (571) 270-1147. The examiner can normally be reached on Monday-Friday 08:30-18:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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